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MCI WORLDCOM

1801 Pennsylvania Avenue, NW
Washington, DC 20006

July 23, 1999

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EX PARTE

Ms. Magalie Roman Salas
Secretary
Federal Communications Commission
The Portals
445 12th Street, S.W.
Washington, D.C. 20554

CC Docket Nos. 96-98, 95-185

Dear Ms. Salas:

At a meeting on July 9, 1999, in which MCI WorldCom discussed the need for UNE-platform to provide service to residential customers, Policy and Program Planning Division staff requested that MCI WorldCom file a written response to several questions regarding the use of unbundled elements to serve business customers. Attached please find MCI WorldCom's explanation of (1) the ways in which MCI WorldCom would be impaired in its ability to offer telecommunications services to business markets customers if denied access to unbundled loops; and (2) the way access to enhanced extended link (EEL) would allow for more efficient provision of service to both business and residential customers.

In accordance with section 1.1206(b)(2) of the Commission's rules, 47 C.F.R. § 1.1206(b)(2), an original and three copies are being filed with your office.

Sincerely,

Lori Wright

Lori Wright
Senior Manager, Regulatory Affairs

cc: Jake Jennings, Carol Mattey, Jon Reel, Claudia Fox, Chris Libertelli, Jodie Donovan-May, Sanford Williams, Jerry Stanshine, and Tony Sicker

MCI WorldCom
July 23, 1999
CC Docket Nos. 96-98; 95-185

MCI WorldCom Response to FCC Staff Informal Request for Impairment Analysis for Business Markets Customers

CC Docket Nos. 96-98; 95-185

MCI WorldCom provides this response to questions raised by staff concerning CLECs' need for unbundled loops and enhanced extended link (EEL) to serve business customers.[1]

Loops for Business Customers. While it is possible to identify factors MCI WorldCom considers in deciding whether or not to provision loops to serve business customers, it would be impossible to devise an administrable rule regarding access to unbundled loops based on these factors, because these factors are customer- and/or location-specific and do not lend themselves to general rules.

To begin, the Commission should recognize that businesses need their local telephone companies to provide services to more than one location. Fewer and fewer business customers seek service at a single stand-alone location. Increasingly business markets are characterized by the sale of customer networks to individual companies with multiple locations, including small satellite offices, or associations of companies (trading ventures or buying consortia or supplier/customer combinations) at multiple locations purchasing service jointly to exploit economies of scale. In addition, multi-location customers frequently move their offices so new connections are needed. To win these customers, MCI WorldCom must meet their demand for connectivity to all locations. If it will take months to build out to a particular customer location (due to inevitable delays in obtaining rights of way, in the physical construction, or other reasons) or if it will never be viable to undertake such a build-out, MCI WorldCom needs an alternative to self-provisioning loops or it will not be able to service even the largest business customers.

At the same time, it is important to understand how the growth of these customer networks (whether for a single multi-location customer or for an association of customers) affect development of the MCI WorldCom network. As we expand our network, the "next" build-out may not be to the densest location or to the location with the largest number of lines. Rather, given the need to support existing customers, we sometimes will build out to a less dense location or to a location where the customer has relatively few lines to expand the customer network we are serving. These build-outs must not be misinterpreted as demonstrating that it would be viable to build out to other locations of the same relatively low density or where a

[1] At the July 9, 1999 meeting, staff also encouraged MCI WorldCom to contact the staff person with responsibility for analysis of specific UNEs to provide additional input on how the individual UNEs should be defined. MCI WorldCom will be contacting those individuals.

customer had the same relatively few lines. The decision to build out frequently is based on customer-specific circumstances, and cannot be used to create a bright-line rule.

Of course, at the major locations of large urban business customers, the high volume of traffic generated and proximity to our existing network frequently allows MCI WorldCom to extend its fiber network all the way to these premises. There is no simple rule of thumb that governs such build out to customer premises, however.

Instead, MCI WorldCom's network planners take into account the following factors when making a decision to extend our network to a customer's premise:

- Revenue impact: This involves both projected additional revenues over time and projected impact on retention of existing revenue streams, taking into account potential cost savings.

- Distance from the existing network: Costs for deploying fiber are very distance sensitive. It would be extremely rare for a customer location that is more than one mile from our local backbone to generate sufficient revenues to justify a build-out of that distance, and frequently smaller revenue projections or other costs reduce the viable distance to far less than one mile.

- Location-specific costs: The costs of extending a fiber ring can be substantially increased — and thus the distance that it is viable to construct to shortened — if rivers, bridges, highways, or other natural or man-made obstacles have to be crossed. As a result, an "easy dig" to a moderate-sized customer location can be viable while an obstructed build out to a larger customer premise is not. Similarly, environmental requirements can add to the cost of a project by requiring MCI WorldCom to re-route a build-out to avoid environmentally sensitive areas or to use extraordinary construction methods.

- Rights of way and permits: Rights of way must be obtained for access to municipal, other governmental, utility, or private parties' property to run our fiber. Permitting is required to build fiber access requiring construction in any public way. These can be time consuming as well as costly. At times the inability to obtain the necessary conduit can make build-out impossible. Permitting turnaround time is often the most substantial obstacle when MCI WorldCom attempts to add a building to its local network.

- Building access: Building access can restrict MCI WorldCom's ability to add a building to a local network. Some building managers attempt to impose fees for access or request revenue-sharing plans that reduce projected net revenues and thus discourage build-out. Sometimes access is denied altogether.

- Local franchise agreements and taxes: Franchise agreements and fees are required by some municipalities in order to build a local network. In addition, some localities impose local communication taxes. All of these reduce the net income from build-out to those localities.

- Regulatory environment: State regulatory policy, including but not limited to the regulations placed on non-dominant carriers, will affect the profitability of providing service in a state, and so affect the placement of a potential build-out location in our queue of construction projects.

Because decisions on network build-out to customer premises are of necessity customer- and location-specific in all of these ways, there is no set of criteria that could be identified in a rule that could fairly distinguish those cases in which MCI WorldCom would construct its own loops from those in which it would need to be able to lease ILEC loops. Despite the breadth of our network relative to all other CLECs, MCI WorldCom is only connected to approximatley 34,000 buildings nationwide. We will not be able to connect to the vast majority of buildings anytime soon. There are thousands, perhaps tens of thousands, of companies throughout the U.S. requiring more than 20 lines at a location, but neither MCI WorldCom nor any other CLEC would have the ability to extend our network to each of those companies seeking our service. Our network is in many, but far from all of the almost 1,500 ILEC serving wire centers nationwide that serve 40,000 or more access lines.

Additionally, the existence of a CLEC collocation at an ILEC serving wire center has no bearing on whether MCI WorldCom would be impaired in its ability to provide service to a particular customer if denied access to ILEC UNEs. The existence of other CLECs' networks in a particular location will rarely affect MCI WorldCom's ability to competitively offer service without access to unbundled ILEC network elements, and where it does so the effect can work in either direction. For example, a CLEC may have deployed a fiber ring and switch in a location because it has captured the only major business customer in that location and tied that customer to a long-term contract. In that scenario, the CLEC's facilities deployment reduces the likelihood it would be feasible for MCI WorldCom to deploy its own facilities in that location and increases our need to rely on ILEC UNEs to competitively serve the other customers in that location. By contrast, if a CLEC or alternative provider has deployed a transport link between two dense traffic nodes, MCI WorldCom is likely to seek out that alternative to ILEC transport unless there are provisioning problems associated with using the alternative transport. There is no bright line exception to ILEC provision of UNE loops that would not result in a substantial portion of business customers being denied alternative sources of telecommunications service.

The ILEC-proposed loop exception surely would slow down or stop competitive

provision of service to small and medium-sized businesses, governmental agencies, and non-profit organizations. The most obvious loss would be for the smaller firms that exceed the ILEC-proposed size threshold but are below a reasonable market-based size threshold, and to larger firms that require their telephone carrier to provide service to smaller offices. But the impact also will be on businesses located in non-central downtown locations, suburban areas, and small urban centers that are served by the approximately 1,500 ILEC serving wire centers that serve 40,000+ lines but are not in immediate proximity to CLEC fiber networks and therefore are beyond range for viable build-out.

Enhanced Extended Loop. EEL is a combination of loop, transport and multiplexing/concentration. If EEL were provided in a reasonable manner, it would allow CLECs to serve business customers located as far as 50 miles from their switches, and so would make it possible for CLECs to be less reliant on ILEC switches. If the ILEC were able to efficiently provision loops in commercial numbers, EEL could be used for the provision of residential services as well. MCI WorldCom, like most CLECs, would like to avoid to the greatest extent possible reliance on ILEC elements, and therefore urges the Commission to require ILECs to make EEL available as a necessary step to promoting facilities-based competition. In this regard, MCI WorldCom's greatest concern is that most ILECs have refused to make EEL available at all or have made it available in an unreasonable manner.

Figure 1 shows how EEL can be most efficiently used by a CLEC to provide business service. An unbundled ILEC loop comes into the ILEC end-office and is terminated at the MDF (or at some other termination point if it is an IDLC loop). The loop can be DS-0, DS-1, or DS-3. It is cross-connected to an ILEC multiplexer and then is connected to unbundled ILEC transport, which can be at the DS-0, DS-1, or DS-3 level.[2] The traffic is then transported to the CLEC switch.

Figure 2 shows how ILECs have added unnecessary requirements to EEL to make it less efficient and less cost-effective for the CLEC to use. For example, Bell Atlantic-North has refused to provide transport from the multiplexer in its end-office directly to the CLEC switch. Instead its tariff requires that its unbundled transport link terminate at a collocation space, typically at an access tandem, where the CLEC then takes the traffic over its own network to its switch. Although the CLEC is only required to set up one collocation space per LATA, this unnecessary configuration introduces two problems. First, the CLEC must pay unnecessary costs associated with that unnecessary collocation. Second, from an engineering perspective, the BA-North offering creates a single point of failure (at the access tandem) that potentially could take

[2] In practice, there may be two cross-connects rather than one cross-connect to get from the loop to the transport.

down ALL CLEC traffic. Both of these problems could be avoid if the EEL could go directly from each end office to the CLEC switch.

In addition, some ILECs have refused to provide all the "flavors" of EEL. They claim that DS-3 transport is competitively provided and therefore they should not be required to provide it as a UNE, alone or in combination. This artificially limits the usefulness of EEL -- for even if it were true that there is always a competitive market in DS-3 transport (and it is not), EEL reduces reliance on ILEC switching because of the efficiencies generated by use of loop, transport, and concentration in combination. ILEC proposals simply make it impossible for CLECs to use their own switches to serve a certain class of business customer.

Some ILECs also have insisted that CLECs certify that EEL be used predominately for local traffic, allegedly to prevent CLECs from using EEL as an alternative to special access. MCI WorldCom strongly opposes such restrictions on EEL as inconsistent with the clear language of the Act, which makes clear that unbundled network elements can be used for the provision of all telecommunications services.

ILECs also have made full use of EEL impossible through anticompetitive pricing. EEL pricing should consist of loop, transport, and muxing charges, all set at TELRIC. Bell Atlantic, however, has imposed very high cross-connect charges without any cost support.

EEL -- especially if it is to be used to service residential and very small business customers -- must also include concentration. CLECs offering residential service typically want to combine an unbundled voice grade (analog) or DS-0 (digital) loop to DS-1 transport. The problem is that typically the amount of traffic on a residential loop is very small relative to the amount of traffic on a business loop. Muxing up from a DS-0 loop to DS-1 transport for residential customers is very inefficient, and would result in inefficient use of the DS-1 transport circuits. Therefore, there is the need to concentrate traffic. Currently, one technically feasible method to concentrate traffic with EEL would be to use a portion of DLC equipment in the ILEC end-office instead of a mux. (See Figure 3.) That is, the ILEC should connect the incoming loops to the DS-1 transport using DLC with GR-303 capability.[3] This configuration already is required for CLECs in Michigan, and Bell Atlantic is placing GR-303 capability in its end-offices for itself because of that technology's ability to efficiently concentrate traffic.

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[3] GR-303 can perform varying levels of concentration, ranging up to 10:1, though most typically it is deployed at 6:1. This allows ILECs or CLECs to serve 144 voice grade lines rather than 24 over a DS-1 transport link. It thus offers very efficient transport back to the CLEC network.

GR-303 does more than concentrate traffic, and these other features of GR-303 provide additional grounds for requiring ILECs to make this technology available to their competitors. In particular, GR-303 also is designed to perform multi-switch hosting and thus can be used to serve multiple CLECs. Additionally, GR-303 can perform electronic cross connects and therefore its deployment will help alleviate the loop provisioning problem that to date in and of itself makes it absolutely necessary for CLECs to have access to the UNE platform.

As with other aspects of EEL, for concentration to be of any use, it must be priced in a competitive manner. Unfortunately, even when ILECs have agreed to provide concentration, they have not agreed to appropriate pricing. For example, Bell Atlantic has agreed to perform the concentration function as part of EEL, but has required CLECs to buy the entire DLC — and effectively collocate the DLC at each end-office as a facility dedicated to only a single CLEC. This is not efficient when a CLEC does not generate enough traffic at an end-office to "fill up" the DLC by itself. Moreover, since the GR-303s have multiple-switch hosting capabilities, there is no reason why multiple CLECs cannot share a single GR-303, paying a price per line.

We hope this information is helpful, and look forward to continued discussion on other matters concerning MCI WorldCom's need for unbundled network elements to serve both business and residential customers.

Figure 1. EEL for Business Customers

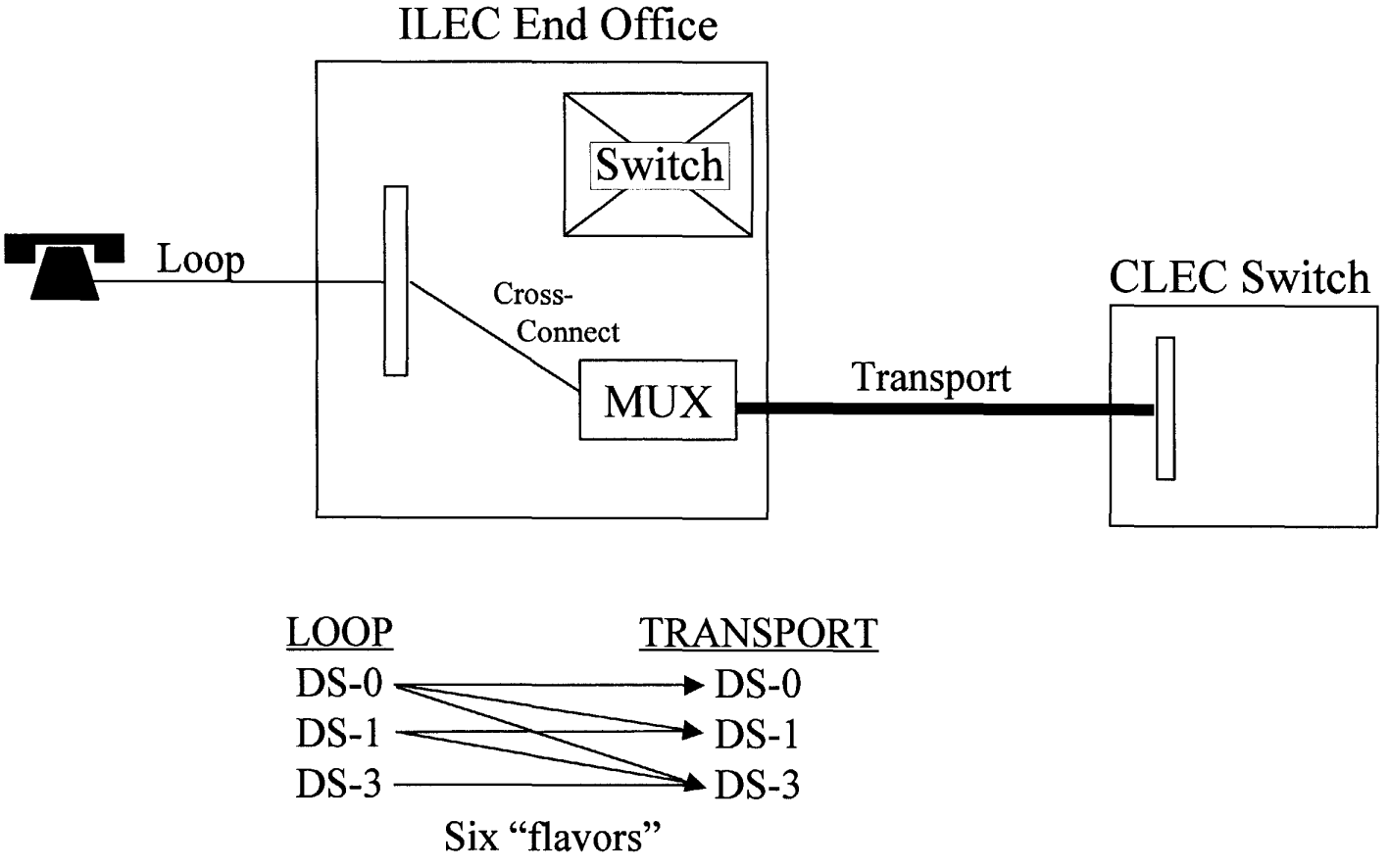


Figure 2. ILEC Proposals for EEL for Business Customers

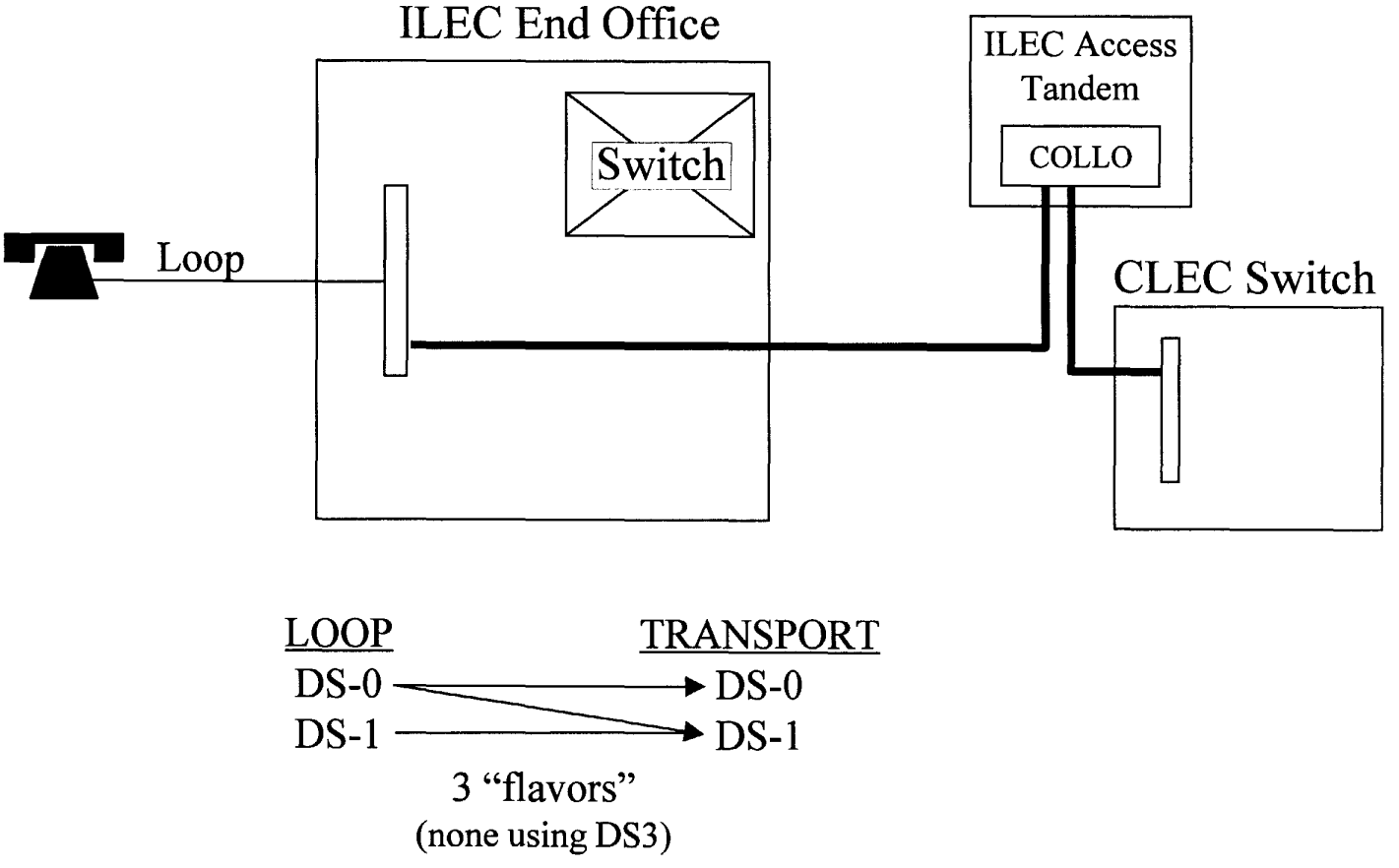
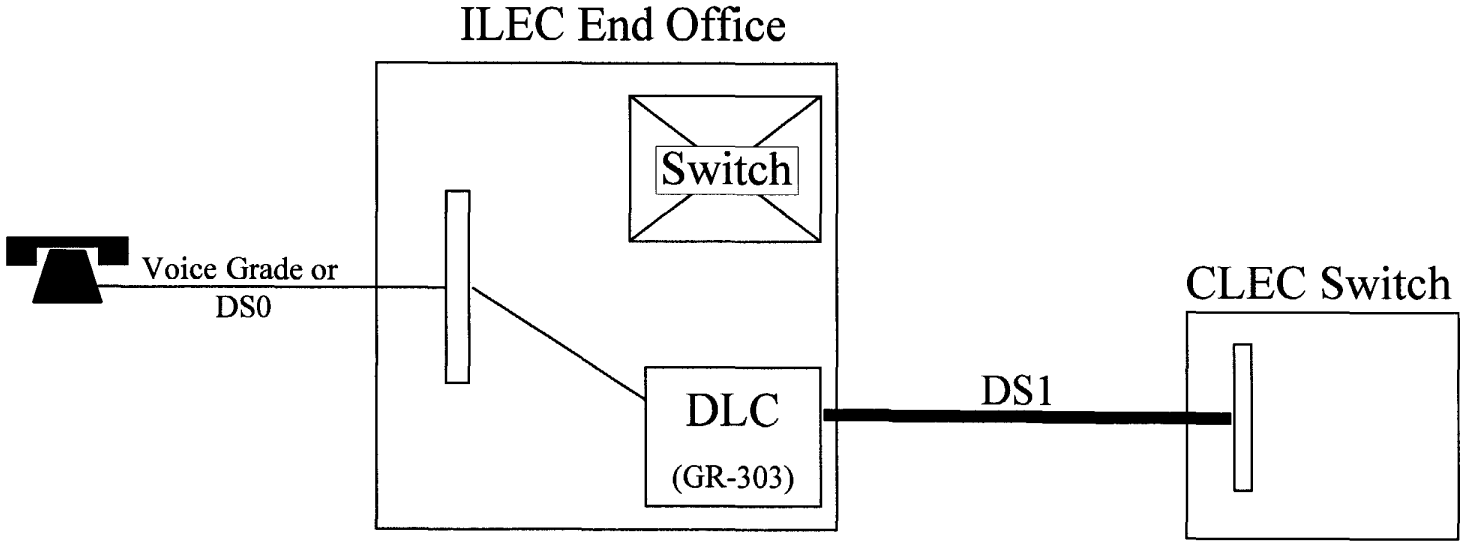


Figure 3. EEL for Residential Customers



Instead of multiplexer,
get 6:1 concentration
from GR-303